

Trainer's Guide

Module 5.2

Basic communication means



Presenter's name: _____

Date: _____



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4.2 Pointing

Learning objectives

By the end of the section, you will understand:

- how pointing develops,
- why pointing is important in the child development, especially in language and communication,
- what are the main functions of pointing in communication,
- the particularity and the use of pointing in IDD

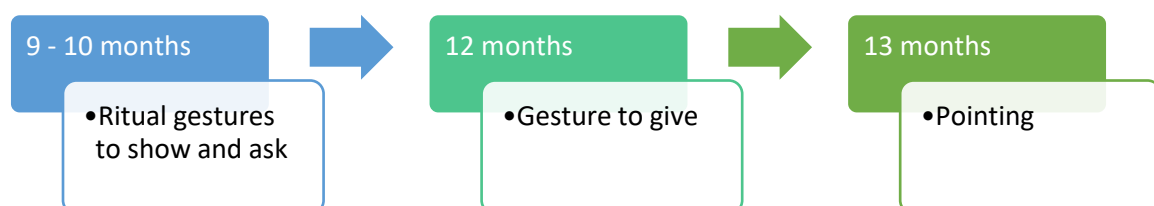
Content

Pointing is defined as the extension of the hand and index finger towards a specific object or event (Colonnesi et al., 2010).



NB: The illustration is generated by artificial intelligence.

The pointing gesture should not be confused with the reaching gesture, i.e. the act of reaching out to grasp an object. Reaching is a precursor to pointing and appears before pointing is produced (Liszkowski & Tomasello, 2011). Pointing appears between 8 and 15 months of age and continues to develop during the 2nd year of life and when expressive language appears (Carpenter et al., 1998).



Pointing appears to be a universal and intercultural behaviour. It is generally considered to be the "royal road to language" (Butterworth, 2003). It is important to note that the understanding and production of pointing do not develop at the same time, even though the two behaviours are linked (Colonnaesi et al., 2010). Indeed, comprehension of pointing is prior to the comprehension (Camaioni et al., 2004).

Pointing is a social act:

- involving the child in an exchange
- often associated with vocalisations (but not systematically)
- associated with a back-and-forth gaze between the direction pointed to and the partner before and after the gesture is produced.
- during which it is necessary to ensure the partner's attention and check that they are looking in the direction indicated

There are two types of pointing in young children (Bates et al., 1975). As pointing gestures are frequently accompanied by intentional vocalisations (Liszkowski & Tomasello, 2011), their prosodic contours make it possible to clearly distinguish the type of pointing produced by the child (Grünloh & Liszkowski, 2015).

Proto-imperative pointing	Proto-declarative pointing
<ul style="list-style-type: none"> • requests for objects • use of the adult as a means of obtaining desired objects <p>→ no interest in a social exchange but only in obtaining a response to a personal need.</p> <p>This is a low-level behaviour that allows you to obtain something without any social act.</p>	<ul style="list-style-type: none"> • preverbal efforts to direct the adult's attention towards an event or object. <p>→ exchange with the speaker</p> <ul style="list-style-type: none"> • to obtain information about something • to share an emotion, etc. <p>This is high-level behaviour requiring:</p> <ul style="list-style-type: none"> • joint attention • Awareness (even minimal) of the other's point of view

Pointing is an important act of communication in the development of young children. It has many social and communicative values: asking for something, asking to name something, attracting attention, sharing an event, etc. Children who produce pointing gestures more frequently at the age of 2 have better later language skills than children of the same



chronological age who produce fewer pointing gestures (Colonnesi et al., 2010). This is because parents tend to provide more verbal responses to their child's gestures, of which pointing is one, than to other non-gestural behaviours (Olson & Masur, 2013).

The link between pointing and language is attributed to the fact that pointing has a social function that enables verbal responses to be induced from the communication partner (Goldin-Meadow, Goodrich, Sauer & Iverson, 2007; Kishimoto, Shizawa, Yasuda, Hinobayashi & Minami, 2007, cited by Wu, 2014). This link is strongest between the ages of 15 and 20 months, i.e. when social and cognitive abilities are developing and when the lexical explosion and the first word combinations appear in the child (Colonnesi et al., 2010). Pointing is still present, however, when the child begins to speak, and pointing gestures are frequently produced along with verbal output (Greenfield & Smith, 1976). The role of pointing in language development is present until the acquisition of morphosyntax (Iverson & Goldin-Meadow, 2005).

When working with people with IDD, setting up pointing is an important step in communication. By pointing, the person is trying to express a choice, which makes it possible to envisage an AAC project.

It is essential to respect the person's pointing strategy, even if it is initially imprecise and incomplete:

- *P. takes the carer to the fridge and fussing to have the fridge opened so she can have a yoghurt, while D. points to the fridge with the palm of his hand to ask for it to be opened.*

It's clear that fussing or pointing with your palm are not the best or most appropriate ways of pointing. While it is appropriate to respond to the person's request because it constitutes an act of communication, it is also important to work on the precision of the pointing and its modelling in a form that is more socially appropriate (in the case of agitation, this may be perceived as an angry movement or a behavioural disorder) and understandable by a wide range of people.

In the case of severe motor impairment, it is not uncommon for pointing to be done solely with the eyes or by orienting the head. It is important that these atypical strategies, which



are barely perceptible to an interlocutor, are spotted and passed on to anyone likely to interact with the IDD sufferer. Identifying these strategies is even more important as they involve positioning objects appropriately in relation to the person's axis of vision to facilitate visual pointing.

It is also important to propose targets that are relevant to everyday activities:

- *In the refectory: offer a personalised place mat with photographs of foods that the person can choose (either on a suitable ruler or directly on the place mat).*



In summary, for the act of pointing be effective and meet its objective, it is necessary to:

Facilitate the pointing act	<ul style="list-style-type: none"> • find an adequate posture so that the person can point. <p>→ considering the preferential use of one hand or arm over the other or, where necessary, offering a stick to make pointing easier.</p> <ul style="list-style-type: none"> • Place the targets in relation to the person's field of vision (central or peripheral) and the characteristics of the targets. <p>→ it is essential to have information on the state of the person's vision.</p>
Identify what the person is pointing at	Real objects, miniatures, photos, pictures, etc.
Motivate	focus on targets that people like, so that they are tempted to point at them.

BIBLIOGRAPHY

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<https://doi.org/10.1177/0142723713493346>

2. Materials Needed

The slides for this presentation (COM-In_PR3_5_2_Pointing_EN.pptx).

A videoprojector



Slides and Content

Slide n°2



Module 5. Basic communication means



Chapter 1: Gaze
Chapter 2: Pointing
Chapter 3: Imitation
Chapter 4: Gestures

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Content :

Notes :

Slide n°3



Module 5. Basic communication means



Chapter 2: Pointing

Learning Objectives

- Understand how pointing develops
- Why pointing is important in the child development, especially in language and communication,
- The particularity and the use of pointing in IDD

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Content :

Learning objectives

By the end of the section, you will understand:

- how pointing develops,
- why pointing is important in the child development, especially in language and communication,
- what are the main functions of pointing in communication,
- the particularity and the use of pointing in IDD

Notes :

Slide n°4



Module 5. Basic communication means Chapter 2: Pointing



Pointing:

Extension of the hand and index finger towards a specific object or event
(Colonna et al., 2010)



NB: The illustration is generated by artificial intelligence.

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Content :

Notes :



Slide n°5



Module 5. Basic communication means Chapter 2: Pointing



Pointing



Reaching

Act of reaching out to grasp an object
Precursor to pointing

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Content :

The pointing gesture should not be confused with the reaching gesture, i.e. the act of reaching out to grasp an object. Reaching is a precursor to pointing and appears before pointing is produced (Liszkowski & Tomasello, 2011).

Notes :

Slide n°6



Module 5. Basic communication means Chapter 2: Pointing



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Content :

Pointing appears between 8 and 15 months of age and continues to develop during the 2nd year of life and when expressive language appears (Carpenter et al., 1998).

Notes :**Slide n°7****Module 5. Basic communication means**
Chapter 2: Pointing**Pointing is a social act**

- Involving the child in an exchange
- Often associated with vocalisations
- Associated with a back-and-forth gaze after the gesture is produced
- During one ensures the partner's attention

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Content :

Pointing appears to be a universal and intercultural behaviour. It is generally considered to be the "royal road to language" (Butterworth, 2003). It is important to note that the understanding and production of pointing do not develop at the same time, even though the two behaviours are linked (Colonnese et al., 2010). Indeed, production of pointing is prior to the comprehension (Camaioni et al., 2004).


Pointing is a social act:

- involving the child in an exchange
- often associated with vocalisations (but not systematically)
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- during which it is necessary to ensure the partner's attention and check that they are looking in the direction indicated




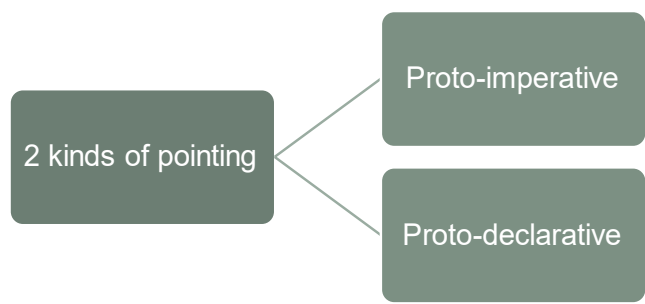
Notes :

Slide n°8



Module 5. Basic communication means
Chapter 2: Pointing





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graph LR; A[2 kinds of pointing] --> B[Proto-imperative]; A --> C[Proto-declarative]
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Content :

There are two types of pointing in young children (Bates et al., 1975). As pointing gestures are frequently accompanied by intentional vocalisations (Liszkowski & Tomasello, 2011), their prosodic contours make it possible to clearly distinguish the type of pointing produced by the child (Grünloh & Liszkowski, 2015). Pointing can be either protoimperative or protodeclarative

Notes :



Slide n°9



Module 5. Basic communication means Chapter 2: Pointing



Proto-imperative pointing	Proto-declarative pointing
<ul style="list-style-type: none"> requests for objects use of the adult as a means of obtaining desired objects 	<ul style="list-style-type: none"> preverbal efforts to direct the adult's attention towards an event or object.
→ no interest in a social exchange but only in obtaining a response to a personal need.	→ exchange with the speaker
	<ul style="list-style-type: none"> to obtain information about something to share an emotion, etc.
This is a low-level behaviour that allows you to obtain something without any social act.	This is high-level behaviour requiring: <ul style="list-style-type: none"> joint attention Awareness (even minimal) of the other's point of view

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Content :

Give the information presented in the table

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Slide n°10



Module 5. Basic communication means Chapter 2: Pointing



Pointing gestures are linked to language

- Children aged 2 with more pointing gestures
→ better language skills
- Pointing enables verbal responses to be induced from the partner
- Strongest link between 15 and 20 months

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Content :



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Pointing is an important act of communication in the development of young children.

It has many social and communicative values: asking for something, asking to name something, attracting attention, sharing an event, etc.

Children who produce pointing gestures more frequently at the age of 2 have better later language skills than children of the same chronological age who produce fewer pointing gestures (Colonnesi et al., 2010). This is because parents tend to provide more verbal responses to their child's gestures, of which pointing is one, than to other non-gestural behaviours (Olson & Masur, 2013).

The link between pointing and language is attributed to the fact that pointing has a social function that enables verbal responses to be induced from the communication partner (Goldin-Meadow, Goodrich, Sauer & Iverson, 2007; Kishimoto, Shizawa, Yasuda, Hinobayashi & Minami, 2007, cited by Wu, 2014). This link is strongest between the ages of 15 and 20 months, i.e. when social and cognitive abilities are developing and when the lexical explosion and the first word combinations appear in the child (Colonnesi et al., 2010). Pointing is still present, however, when the child begins to speak, and pointing gestures are frequently produced along with verbal output (Greenfield & Smith, 1976). The role of pointing in language development is present until the acquisition of morphosyntax (Iverson & Goldin-Meadow, 2005).

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Slide n°11



Module 5. Basic communication means Chapter 2: Pointing



Pointing in people with IDD: allow to express choice

→ Essential to respect the person's pointing strategy, even imprecise and incomplete

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Content :

When working with people with IDD, setting up pointing is an important step in communication. By pointing, the person is trying to express a choice, which makes it possible to envisage an AAC project.

It is essential to respect the person's pointing strategy, even if it is initially imprecise and incomplete:

Notes :



Slide n°12



Module 5. Basic communication means

Chapter 2: Pointing



Pointing in people with IDD: allow to express choice

→ Essential to respect the person's pointing strategy, even imprecise and incomplete

Examples:

P. takes the carer to the fridge and fussing to have the fridge opened so she can have a yoghurt

D. points to the fridge with the palm of his hand to ask for it to be opened.

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Content :

For example:

P. takes the carer to the fridge and fussing to have the fridge opened so she can have a yoghurt, while D. points to the fridge with the palm of his hand to ask for it to be opened.

- it's clear that fussing or pointing with your palm are not the best or most appropriate ways of pointing. While it is appropriate to respond to the person's request because it constitutes an act of communication, it is also important to work on the precision of the pointing and its modelling in a form that is more socially appropriate (in the case of agitation, this may be perceived as an angry movement or a behavioural disorder) and understandable by a wide range of people.
- In the case of severe motor impairment, it is not uncommon for pointing to be done solely with the eyes or by orienting the head. It is important that these atypical strategies, which are barely perceptible to an interlocutor, are spotted and passed on to anyone likely to interact with the IDD sufferer. Identifying these strategies is even more important as they involve positioning objects appropriately in relation to the person's axis of vision to facilitate visual pointing.

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Module 5. Basic communication means Chapter 2: Pointing



Propose targets relevant to daily activities



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Content :

It is also important to propose targets that are relevant to everyday activities:

- *In the refectory: offer a personalised place mat with photographs of foods that the person can choose (either on a suitable ruler or directly on the place mat).*

Notes :

Slide n°14



Module 5. Basic communication means

Chapter 2: Pointing



Facilitate the pointing act	<ul style="list-style-type: none">• find an adequate posture so that the person can point.• Place the targets in relation to the person's field of vision (central or peripheral) and the characteristics of the targets.
Identify what the person is pointing at	Real objects, miniatures, photos, pictures, etc.
Motivate	focus on targets that people like, so that they are tempted to point at them.

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Content :

In summary, for the act of pointing be effective and meet its objective, it is necessary to:

- facilitate the pointing act
 - This can be done by finding an adequate posture so that the person can point; for example, considering the preferential use of one hand or arm over the other or, where necessary, offering a stick to make pointing easier
 - This can also be done by placing the targets in relation to the person's field of vision (central or peripheral) and in relation to the characteristics of the targets

Thus, it is essential to have information on the stage of the person's vision

- identify what the person is pointing at
- Motivate the persons= by focusing on their interests, on targets they like

Notes :



Slide n°15



Module 5. Basic communication means Chapter 2: Pointing



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Content :

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